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P O Box 1450 Alexandria, Virgima 22313-1450

DATE MAILED: 04/03/2008

### NOTICE OF ALLOWANCE AND FEE(S) DUE

65913	7590	04/03/2008		EXAMINER		
NXP, B.V.				NGUYEN	N, HIEU P	
NXP INTELLECTUAL PROPERTY DEPARTMENT			ART UN	T	PAPER NUMBER	
M/S41-SJ			2017		•	

1109 MCKAY DRIVE SAN JOSE, CA 95131

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538 632	02/09/2006	Saleh Osman	US02 0557 US	5305

TITLE OF INVENTION: PRESERVING LINEARITY OF AN ISOLATOR-FREE POWER AMPLIFIER BY DYNAMICALLY ADJUSTING GAIN AND PHASE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$300	\$0	\$1740	07/03/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GARAT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used to correspondence including d below or directed off tions	for transmitting the ISS ing the Patent, advance of herwise in Block 1, by (	THE FEE and PUBLICATION OF REPORT OF THE PUBLICATION OF THE PUBLICATIO	ON FEE (if require naintenance fees wil spondence address; a	ed). Blocks 1 through 5 If be mailed to the currer and/or (b) indicating a sep	should be completed where it correspondence address as parate "FEE ADDRESS" for	
		ock 1 for any change of address)	Feet	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.			
M/S41-SJ	7590 04/03 CTUAL PROPERT		I be	Certi	ficate of Mailing or Tran Fee(s) Transmittal is being		
1109 MCKAY E SAN JOSE, CA						(Depositor's name)	
						(Signature)	
						(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTORNEY DOCKET NO. CONFIRMATION N		
10/538,632	02/09/2006		Saleh Osman		US02 0557 US	5395	
TITLE OF INVENTION PHASE	: PRESERVING LINE	ARITY OF AN ISOLAT	OR-FREE POWER AMPI	JFIER BY DYNAM	IICALLY ADJUSTING O	GAIN AND	
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE TOTAL FEE(S) DU	E DATE DUE	
nonprovisional	NO	\$1440	\$300	\$0	\$1740	07/03/2008	
EXAM	INER	ART UNIT	CLASS-SUBCLASS	1			
NGUYEN		2817	330-278000	_			
"Fee Address" indi PTO/SB/47; Rev 03-0 Number is required.  3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 2 or more recent) attach ND RESIDENCE DAT. ess an assignce is ident h in 37 CFR 3.11. Comp	mge of Correspondence  "Indication form led. Use of a Customer  A TO BE PRINTED ON	2. For printing on the p (1) the names of up to or agents OR, alternative (2) the name of a single registered attorney or a 2 registered patent atto listed, no name will be THE PATENT (print or type data will appear on the p of a substitute for filing an (B) RESIDENCE: CCTTY	3 registered patent vely, e firm (having as a r agent) and the names rneys or agents. If no printed.	nember a 2 of up to a mame is 3 e is identified below, the	document has been filed for	
Please check the appropri	iate assignee category or		orinted on the patent):	Individual 🗖 Cor	poration or other private g	roup entity Government e shown above)	
☐ Issue Fee☐ Publication Fee (No small entity discount permitted)			☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached.				
Advance Order - #	f of Copies		The Director is hereby overpayment, to Depo	authorized to charge sit Account Number	the required fee(s), any o (enclose	leficiency, or credit any an extra copy of this form).	
5. Change in Entity Stat	tus (from status indicate s SMALL ENTITY state		☐ b. Applicant is no lon	ger claiming SMALI	ENTITY status. See 37 0	CFR 1.27(g)(2).	
NOTE: The Issue Fee and interest as shown by the r	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademar	ed from anyone other than t k Office.	he applicant; a regist	ered attorney or agent; or	the assignee or other party in	
Authorized Signature				Date			
Typed or printed name			Registration No.				
This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C itality is governed by 35 I application form to the ons for reducing this bu irginia 22313-1450. DO 13-1450.	CFR 1.311. The informati U.S.C. 122 and 37 CFR USPTO. Time will var rden, should be sent to the ONOT SEND FEES OR	ion is required to obtain or r R 1.14. This collection is est y depending upon the indivi- he Chief Information Office COMPLETED FORMS TO	etain a benefit by the imated to take 12 mi idual case. Any con er, U.S. Patent and T D THIS ADDRESS.	e public which is to file (a inutes to complete, includ ments on the amount of ( rademark Office, U.S. De SEND TO: Commissione	nd by the USPTO to process) ing gathering, preparing, and ime you require to complete partment of Commerce, P.O. r for Patents, P.O. Box 1450,	

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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



SAN JOSE, CA 95131

# UNITED STATES PATENT AND TRADEMARK OFFICE

#### UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

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10/538,632	(	02/09/2006	Saleh Osman	US02 0557 US	5395
65913	7590	04/03/2008		EXAM	IINER
NXP, B.V.				NGUYEN	N, HIEU P
NXP INTELLE	CTUAL P	ROPERTY DE	PARTMENT	ART UNIT	PAPER NUMBER
M/S41-SJ 1109 MCKAY DRIVE				2817 DATE MAILED: 04/03/200	18

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 213 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 213 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)	
10/538,632	OSMAN ET AL.	
Examiner	Art Unit	
HELLD NGLIVEN	2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to 01/29/2008.
- The allowed claim(s) is/are 1-3,5-15,17 and 18.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - b) ☐ Some\* c) ☐ None of the: a)  $\square$  All
    - 1. T Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No.
    - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. 

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

# Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date
- 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. X Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other .

Application/Control Number: 10/538,632

Art Unit: 2817

## DETAILED ACTION

# EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 17, line 1, "claim 16" has been replaced by --claim 15--.

# Allowable Subject Matter

Claims 1-3, 5-15 and 17-18 are allowed.

The following is an examiner's statement of reasons for allowance:

Claims 1-3, 5-14 and 17 are allowed over the prior art of record. The prior art of record considered individually or in combination, fails to fairly teach or suggest the claimed circuit comprising, among other limitations and unobvious limitations of "a control circuit that independently controls the first active device and the second active device, and which control said phase shifter in response to said levels of forward signal and reflected signal to substantially maintain linearity of said amplifier circuit with load variations" or "a control circuit which independently and selectively controls switching said phase shifter, said at least first active device, and said at least second active device as a function of said levels of forward signal and reflected signal to substantially maintain linearity of said amplifier circuit with load variations" or "a control circuit that control said phase shifter" structurally and functionally interconnected with other limitations in the manner as cited in the claims.

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Claim 15 is allowed over the prior art of record. The prior art of record considered individually or in combination, fails to fairly teach or suggest the claimed circuit comprising, among other limitations and unobvious limitations of "modifying a first gain of a first active device and a driver stage and a second gain of a second active device of an output stage of said amplifier circuit in response to said levels" structurally and functionally interconnected with other limitations in the manner as cited in the claims.

Claim 18 is allowed over the prior art of record. The prior art of record considered individually or in combination, fails to fairly teach or suggest the claimed circuit comprising, among other limitations and unobvious limitations of "a capacitor coupled between the phase shifter and the output stage" structurally and functionally interconnected with other limitations in the manner as cited in the claims.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu P. Nguyen whose telephone number is 571-272-8577. The examiner can normally be reached on M-F: 8 A.M - 5P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hieu Nguyen Au: 2817 Robert Pascal Primary Examiner

HN

/Robert Pascal/ Supervisory Patent Examiner, Art Unit 2817